

Amendment to the Claims:

1. (Currently Amended) ~~An analysis apparatus, in particular~~
a spectroscopic analysis apparatus, for analysing an object comprising:
- an excitation system ~~for which emitting~~ an excitation beam to excite
a target region,
5 - a beam separation unit ~~for which separating~~ at least part of
elastically scattered radiation from inelastically scattered radiation, said scattered
radiation being generated by the excitation beam at the target region,
- a monitoring system ~~for which generating~~ an image of the target
region using the ~~elastically scattered or the inelastically scattered~~ radiation and ~~for~~
10 ~~defining which defines~~ a region of interest in said image,
- a detection system ~~for which detecting~~ scattered radiation from the
defined region of interest generated by the excitation beam and
- a control unit ~~for which at least one of:~~
15 ~~controlling~~ the excitation system such that only the
defined region of interest of the target region is excited, and ~~and/or for~~
~~controlling~~
controls the detection system such that only signal the
scattered radiation from the defined region of interest ~~[[are]]~~ is
detected.
2. (Currently Amended) ~~[[An]]~~ The analysis apparatus as
claimed in claim 1,
wherein said monitoring system ~~is adapted to distinguishes~~ between
~~different blood and non-blood~~ image portions using contrast information in the image.
3. (Currently Amended) ~~[[An]]~~ The analysis apparatus as
claimed in claim 1,
wherein said monitoring system ~~is adapted to distinguishes~~ between
different image portions using spectral information in the ~~detected~~ scattered radiation.

4. (Currently Amended) [[An]] The analysis apparatus as claimed in claim 1, wherein said detection system comprises:

a filter ~~for separating~~which separates high frequency spectral portions in a Raman signal, ~~in particular~~which high frequency spectral portions comprising include contributions from protein and water, from low frequency spectral portions, ~~in particular~~which low frequency spectral portions include a fingerprint spectral region.

5. (Currently Amended) [[An]] The analysis apparatus as claimed in claim 1, wherein said monitoring system is adapted for emitting a monitoring beam to image the target region.

6. (Currently Amended) [[An]] The analysis apparatus as claimed in claim 5, further comprising:

a radiation source ~~to emit an output~~which emits the excitation beam;
and

an optical separation system ~~to which~~separates the monitoring beam scattered radiation and the excitation beam from the output beam inelastically scattered radiation.

7. (Currently Amended) [[An]] The analysis apparatus as claimed in claim 1, wherein said monitoring system includes:

a confocal scanning laser microscope, [[and]] said detection system [[has]] having a confocal relationship with the confocal scanning laser microscope.

8. (Currently Amended) [[An]] The analysis apparatus as claimed in claim 1, wherein said monitoring system includes:

an orthogonal polarised spectral imaging arrangement.

9. (Currently Amended) [[An]] The analysis apparatus as claimed in claim 1, wherein said control system is adapted for controlling unit controls said excitation system to distribute the laser power excitation beam over the defined region of interest.

10. (Currently Amended) [[An]] The analysis apparatus as claimed in claim 1, wherein the defined region of interest corresponds to blood and said control system is adapted for controlling unit based on the images generated by the monitoring system controls said detection system to:

5 block unwanted signals inelastically scattered radiation from parts of the defined target region of interest corresponding to tissue other than blood and

[[to]] detect only wanted signals inelastically scattered radiation from the defined region of interest such that the detection system detects only inelastically scattered radiation from blood.

11. (Original) An analysis method, in particular a spectroscopic analysis method, for analysing an object comprising the steps of:

- emitting an excitation beam to excite a target region,
- separating at least part of elastically scattered radiation from
5 inelastically scattered radiation, said scattered radiation being generated by the excitation beam at the target region,

- generating an image of the target region using the elastically scattered or the inelastically scattered radiation,

- defining a region of interest in said image,

10 - controlling the excitation system such that the defined region of interest of the target region is excited and/or controlling the detection system such that signals from the defined region of interest of the target region are detected, and

- detecting scattered radiation from the defined region of interest generated by the excitation beam.

12. (New) The method as claimed in claim 11, wherein the target region is a section of anatomy and the defined region corresponds to blood.

13. (New) The method as claimed in claim 12, wherein the controlling step at least one of:

controls the exciting step to excite only the blood in the target region,
and

5 controls the detecting step to detect only scattered radiation from the blood in the target region.

14. (New) The method as claimed in claim 13, further including:

spectrally analyzing the inelastically scattered radiation, such that the spectrally analyzed inelastically scattered radiation is only generated by the excitation
5 beam in the blood in the target region.

15. (New) A spectroscopic analysis apparatus comprising:

a excitation unit which emits an excitation beam to excite a target region, the excitation beam exciting scattered radiation including elastically scattered radiation and inelastically scattered radiation, from the target region;

5 a monitoring system which generates an image of the target region from the scattered radiation, distinguishes between different image portions using contrast or spectral information, and defines a region of interest of the target region based on a selected one of the distinguished image portions;

an optical system which

10 moves the excitation beam across the target region,
directs the scattered radiation to the monitoring system,
separates at least a portion of the inelastically scattered radiation from the scattered radiation;

a detection unit which spectroscopically analyzes the inelastically
15 scattered radiation from the region of interest separated by the optical system; and

a control unit which controls at least one of:

the optical system to move the excitation beam such that the radiation beam excites only the defined region of interest of the target region,

20 controls the detection unit to spectrally analyze only the inelastically scattered radiation from the defined region of interest.

16. (New) The apparatus as claimed in claim 15, wherein the selected distinguished image portion is a blood vessel such that the detection system only spectrally analyzes blood in the target region.